The opinion in support of the decision being entered today was $\underline{\text{not}}$ written for publication and is $\underline{\text{not}}$ binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

MAILED

AUG 1 0 2005

U.S. PATENT AND TRADEMARK OFFICE BOARD OF PATENT APPEALS AND INTERFERENCES Ex parte HOWARD PREISSMAN

Appeal No. 2005-1292 Application No. 09/828,539

ON BRIEF

Before GARRIS, WALTZ, and PAWLIKOWSKI, <u>Administrative Patent</u> <u>Judges</u>.

GARRIS, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on an appeal which involves claims 33-44 and 46-53.

The subject matter on appeal relates to an injectable composition comprising a matrix having therein radiopaque particles within a specified size range. This appealed subject matter is adequately represented by independent claims 33, 40 and 47 which are all of the independent claims on appeal and which read as follows:

33. An injectable composition comprising:

a biocompatible matrix;

radiopaque particles mixed within said biocompatible matrix, said radiopaque particles having a particle size between about 120μ and 2200μ ; and

liquid contrast agent.

40. An injectable composition comprising:

a flowable matrix;

radiopaque particles in said flowable matrix, said radiopaque particles having a size between about 350μ and about 2200μ so as to be individually visible during implantation and

radiopaque particles for contrast having a particle size up to about $350\mu\text{.}$

47. An injectable composition comprising:

a hard tissue implant biocompatible matrix; and

radiopaque particles mixed within said biocompatible matrix, said radiopaque particles having a particle size between about 120μ and 2200μ .

The references set forth below are relied upon by the Examiner in the \S 102 and \S 103 rejections before us:

Ersek et al. (Ersek)	5,258,028	Nov.	2,	1993
Cooke et al. (Cooke)	5,336,699	Aug.	9,	1994
Draenert et al. (Dra	enert) 6,080,801	June	27.	2000

Claims 40-44 are rejected under 35 U.S.C. § 102(b) as being anticipated by Ersek.

Claims 33-39 and 46 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Draenert in view of Ersek.

Finally, claims 47-53 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Cooke in view of Ersek.

As indicated on page 7 of the brief, certain of the appealed claims have been grouped and argued separately. In our disposition of this appeal, we have individually considered these separately grouped and argued claims.

A full exposition of the opposing viewpoints expressed by the Appellant and by the Examiner concerning these rejections appears in the brief and in the answer.

OPINION

For the reasons which follow, we will sustain each of the § 103 rejections but not the § 102 rejection advanced on this appeal.

The Section 102 rejection

As correctly indicated by the Examiner, Ersek discloses an injectable composition comprising a flowable matrix containing particles which may be radiopaque (e.g., see the abstract and lines 15-18 in column 3). These particles are textured to militate against migration and have a size between about 30 microns and 3000 microns (e.g., see the paragraph bridging columns 3 and 4). According to Ersek, the specific particle size employed in his composition is desirably uniform and is optimized relative to the implantation use under consideration (e.g., see lines 45-49 in

column 3, the paragraph bridging columns 5 and 6 and lines 27-44 in column 6).

In opposing the Examiner's § 102 rejection, the Appellant argues that "Ersek very clearly <u>fails</u> to disclose a composition containing particles in two size ranges (much less those claimed)" and that Ersek "merely teaches the concept of random variation about an "optimal particle size" as it expresses at col. 6:line 9" (brief, page 8). In response to this argument, the Examiner presents the following rebuttal on page 6 of his answer:

Although the Examiner agrees that Ersek teaches the concept of random variation about an optimal particle size, if Ersek were to chose 350μ as the optimal target size (which falls within Ersek's range of between 30μ and 3000μ), some particles would be smaller that 350μ and some particles would be above 350μ , which would fall within the recited "two ranges" that applicant has claimed. Therefore, the examiner believes that Ersek still anticipates claims 40-44.

The Examiner's position, though rational, nevertheless is deficient because it relates to obviousness rather than anticipation. Contrary to the Examiner's apparent belief, a narrow claimed range, such as the claim 40 range "between about 350μ and about 2200μ " is not anticipated by a broad prior art range, such as

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Ersek's range of "between about 30μ and 3000μ " (Abstract). This is because anticipation under § 102 requires that the claimed subject matter be identically disclosed in the prior art reference. <u>In re Arkley</u>, 455 F.2d 586, 587, 172 USPQ 524, 526 (CCPA 1972). Thus, a claimed range is anticipated only when the reference discloses a specific value within the range. See Atlas Powder Co. v. IRECO Inc., 190 F.3d 1342, 1345, 51 USPQ2d 1943, 1945-46 (CAFC, 1999). Also see Ex parte Lee, 31 USPQ2d 1105, 1106 (Bd. Pat. App. & Int. 1993). Here, for the Examiner's § 102 rejection to the proper, the Ersek reference must clearly and unequivocally disclose particle size values within the here claimed ranges without any need for picking, choosing, and combining various disclosures not directly related to each other by the teachings of the reference. See Arkley, 455 F.2d at 587, 172 USPQ at 526. Such picking and choosing may be entirely proper in making a § 103, obviousness rejection, but it has no place in the making of a § 102, anticipation rejection. Id.

¹It is a long established legal principle that patentability is conferred by unexpectedly superior advantages of a narrow claimed range relative to a broad prior art range. For example, see In re Waymouth, 499 F.2d 1273, 1276, 182 USPQ 290, 293 (CCPA 1974) and In re Russell, 439 F.2d 1228, 1231, 169 USPQ 426, 428 (CCPA 1971).

As implicitly acknowledged by the Examiner's above quoted rebuttal on page 6 of the answer (i.e., "if Ersek were to choose 350μ as the optimal target size"; emphasis added), his anticipation position is inappropriately based on choosing a 350μ particle size from Ersek's broadly disclosed range of 30 to 3000μ . While a number of specific particle size values are disclosed in the Ersek reference (e.g., see the 100, 150, and 600μ values expressly disclosed in example 1), patentee clearly does not expressly disclose the specific 350μ size upon which is based the Examiner's § 102 rejection.

Under these circumstances, we cannot sustain the Examiner's \$ 102 rejection of claims 40-44 as being anticipated by Ersek.

The Section 103 rejection based on Draenert in view of Ersek

The Appellant does not dispute with any reasonable specificity the Examiner's finding that "[r]eferring to claim 33, Draenert discloses a composition comprising a biocompatible matrix (col. 3, lines 22-29), radiopaque particles, and a liquid contrast agent (liquid and/or solid contrast agents, col. 3, line 58-64)" (Answer, page 4). Likewise, the Appellant does not reasonably contest

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the Examiner's determination that, "[b]ecause Ersek's particle sizes are injectable, Draenert's composition of even smaller particles is inherently injectable" (Answer, page 4). Instead, it is the Appellant's basic position that the rejection under consideration is improper because no appropriate basis exists for combining the teachings of Draenert with the teachings of Ersek.

However, this argument has no apparent relevance to the rejection of appealed independent claim 33. The only claim 33 feature which has not been implicitly conceded by the Appellant to be disclosed by Draenert concerns the claim recitation "radiopaque particles having a particle size between about 120μ and 2200μ ." While patentee does not disclose this entire range of particle sizes, it is clear that particle sizes within this range are expressly taught in the Draenert patent. We here reiterate the Examiner's additional finding that,

"although Draenert focuses on particles sizes of $5\mu-15\mu$ (col. 3, lines 29-30), Draenert also discloses the use of particles up to 250μ (col.3, lines 39-40), which falls within the range claimed by the applicant" (Answer, page 7).

This additional finding also has not been contested by the the Appellant with any reasonable specificity. Regarding this

finding, we again emphasize that a range is "anticipated" by any single prior art reference disclosure of a value which falls within the claimed range. Atlas Powder, 190 F.3d at 1345, 51 USPQ2d at 1945-46 (CAFC 1999). It follows that every requirement of appealed independent claim 33 is expressly taught, or at least would have been suggested, by Draenert alone. Viewed from this perspective, the § 103 rejection of claim 33 appears to be based upon the ultimate obviousness, namely, a lack of novelty.

See In re Fracalossi, 681 F.2d 792, 794, 215 USPQ 569, 571 (CCPA 1982).

Analogous reasoning applies to separately argued dependent claim 35. Again, the Appellant's argument concerning this claim relates only to whether the teachings of Draenert and Ersek are properly combinable. However, no such combination is necessary since the "hard tissue implant material" feature of this claim is disclosed by Draenert (e.g., see the Abstract). Indeed, the Appellant implicitly concedes as much in the paragraph bridging pages 9 and 10 of the brief.

With respect to the issue of whether the teachings Draenert and Ersek are combinable, it is appropriate to correct certain erroneous beliefs expressed by the Appellant. Specifically, the

Appellant believes these teachings are not combinable primarily because Draenert is concerned with a hard tissue implant material whereas Ersek is concerned with a soft tissue implant material which involves migration issues not relevant to a hard tissue environment. Contrary to the Appellant's belief, the teachings of Ersek unquestionably are directed to hard as well as soft tissue implant materials (e.g., see lines 50-60 in column 3, lines 27-44 in column 6 and lines 53-63 in column 9). For this reason, the Ersek reference constitutes evidence of what was known in the prior art concerning both hard as well as soft tissue implant materials including appropriate particle sizes for such materials.

Finally, the Appellant argues that "no <u>prima facie</u> case has been made, particularly with respect to claims 37-39 and 46 for the reason of Ersek not teaching the use of two discrete sets of particles having sizes within differing ranges" (Brief, page 11). This argument is unpersuasive for a number of reasons. First, these claims do not necessarily require "two discrete sets of particles having sizes within differing ranges" (<u>Id.</u>) as the Appellant seems to believe. For example, particle sizes of about 350µ fall within each of the ranges defined by claims 37/36 and 46/36. Additionally, Draenert teaches using particles having

a range of size distributions (e.g., see lines 29-40 in column 3 and examples 1-3 in columns 5 and 6).

In light of the foregoing, it is our ultimate determination that the reference evidence adduced by the Examiner establishes a prime facie case of obviousness which the Appellant has failed to successfully rebut with argument or evidence of nonobviousness. We hereby sustain, therefore, the Examiner's § 103 rejection of claims 33-39 and 46 as being unpatentable over Draenert in view of Ersek.

See In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992)

The Section 103 rejection based on Cooke in view of Ersek

Cooke discloses an injectable bone cement composition which corresponds to the composition of appealed independent claim 47 except that patentee's particles are disclosed as having an average size of from about 5 to 100µ (e.g., see lines 20-25 in column 4). While it is conceivable that an average particle size of 100µ might include particles having, for example, a 120µ size, the Cooke reference contains no express teaching of radiopaque particles having a particle size between about 120µ and 2200µ as required by the independent claim under review. In this regard, we share the Examiner's ultimate conclusion that the combined teachings of the

applied references would have suggested providing Cooke's bone cement composition with radiopaque particles having a particle size within this range in view of the Ersek reference evidence that such particle sizes were known in the prior art for use in hard as well as soft tissue implant material. Based on this reference evidence, an artisan would have reasonably expected success in using particle sizes, for example, of about 120µ in the hard tissue implant material of Cooke. In re O'Farrell, 853 F.2d 894, 903, 7 USPQ2d 1673, 1680-81 (Fed. Cir. 1988).

Concerning this matter, the Appellant again argues that the teachings of Ersek "are not pertinent in the context of hard tissue implantation/implant material" (Brief, page 12). As fully explained above, however, the Ersek reference is not limited to soft tissue implant material as the Appellant believes. Thus, contrary to the argument under consideration, the teachings of this reference are in fact pertinent and indeed expressly directed to hard tissue implant material.

As for separately argued dependent claims 52 and 53, the Appellant states that these claims "specifically call for a composition including two distinct size ranges of particles" and

argues that "Ersek presents no such teaching" (Brief, page 13). As with earlier discussed claims, however, dependent claims 52 and 53 neither recite nor require "two distinct size ranges of particles" ($\underline{\text{Id.}}$). This is because each of the range requirements of claims 52/49 and 53/49 is satisfied by particle sizes of about 350μ .

For these reasons, we again determine that the here applied references establishes <u>prima facie</u> case of obviousness which the Appellant has failed to successfully rebut with argument or evidence of nonobviousness. Accordingly, we also hereby sustain the Examiner's § 103 rejection of claims 47-53 as being unpatentable over Cooke in view of Ersek. <u>Oetiker</u>, 977 F.2d at 1445, 24 USPQ2d at 1444.

OTHER ISSUES

We previously explained that the Examiner's § 102 rejection of claims 40-44 was improper, not because his assessment of the particle size requirements of claim 40 was incorrect but, because his rationale (i.e., "if Ersek were to choose 350μ as the optimal target size"; Answer, page 6) extended beyond the penumbra of anticipation and into the penumbra of obviousness. Therefore, upon

return of this application to the jurisdiction of the Examining Corps., the Examiner (and the Appellant) should consider the propriety of rejecting claims 40-44 under 35 U.S.C.

§ 103(a) as being unpatentable over Ersek alone or in combination with other prior art such as Draenert and Cooke. The consideration of such a rejection is particularly appropriate because claims 40-44 correspond in a number of respects to other appealed claims which were determined above to be unpatentable under 35 U.S.C.

§ 103(a).

SUMMARY

In conclusion, we have sustained the respective \$ 103 rejections of claims 33-39 and 46 and of claims 47-53, but we have not sustained the \$ 102 rejection of claims 40-44.

Therefore, the decision of the Examiner is affirmed-in-part.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED-IN-PART

BRADLEY R. GARRIS

Administrative Patent Judge

THOMAS A. WALTZ

Administrative Patent Judge

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Administrative Patent Judge

BEVERLY A. PAWLIKOWSKI

BRG/jrg

BOZICEVIC, FIELD & FRANCIS LLP 1900 UNIVERSITY AVENUE SUITE 200 EAST PALO ALTO, CA 94303